



**PATENT**

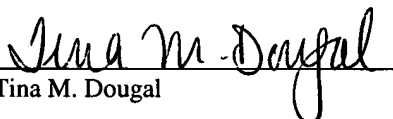
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Brent M. Segal, et al Examiner: TBA  
Serial No.: 10/693,241 Group Art Unit: 2818  
Filed: October 24, 2003  
For: **Device Selection Circuitry Construed with Nanotube Technology**  
Atty. Docket No.: 112020.126US2 / NAN-2

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**CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.8(a)**

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Tina M. Dougal

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Commissioner for Patents  
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Alexandria, Virginia 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §1.97, Applicants hereby makes of record the publications listed on the attached Form PTO-1449 and enclose copies herewith.

It is respectfully requested that the information above be expressly considered during the prosecution of this application and that the publications be made of record therein and appear among the "References Cited" on any patent to issue therefrom. In this regard, it is requested that the Examiner initial and return a copy of the enclosed Form PTO-1449 with the next Patent Office Communication.

This submission does not represent that a search has been made and does not constitute an admission that the listed publications are material to patentability or that the listed publications are prior art.

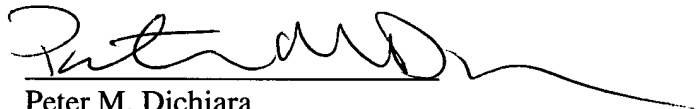
Applicants further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed publications should the publication be applied against the claims of the present application.

It is Applicants' belief that the filing of this Information Disclosure Statement precedes the date of the mailing of the first Office Action on its merits; therefore, pursuant to 37 C.F.R. §1.97(b)(3), no fee is believed to be due.

In the event a fee is due, the Commissioner is authorized to charge any fee deficiency or credit any overpayment to Deposit Account No. 08-0219.

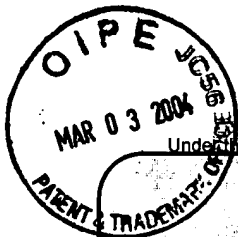
Respectfully submitted,

Dated: February 27, 2004



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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Application Number	10/693,241
Filing Date	10/24/2003
First Named Inventor	Segal, et al
Art Unit	2818
Examiner Name	TBA
Attorney Docket Number	112020.126US2 NAN-2

Total Number of Pages in This Submission

**ENCLOSURES (Check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): - Postcard
<b>Remarks</b> 1. PTO Form 1449 (3 pgs.) 2. 52 Publications		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

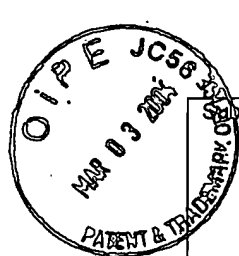
Firm or Individual name	Peter M. Dichiaro
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Date	02/27/2004

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Signature		Date	02/27/2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Int. For, PTO-1449				Docket Number 112020.126US2 NAN-2		Application Number 10/693,241	
INFORMATION DISCLOSURE IN AN APPLICATION  (Use several sheets if necessary)				Applicant Segal, et al.			
				Filing Date October 24, 2003		Group Art Unit 2818	
Sheet	1	OF	3				

U.S. Patent Documents						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	2001/0004979	06/28/01	Han et al.	216	4	
	2002/0125805	09/12/2002	Hsu	313	309	
	2002/0112814	08/22/02	Hafner, et al.	156	272.2	
	2002/0130353	09/19/02	Lieber et al.	257	315	
	2002/0160111	10/31/02	Sun et al.	427	248.1	
	2002/0172639	11/12/02	Horiuchi	423	477.2	
	2002/0173083	11/21/02	Avouris et al.	438	129	
	2002/0175323	11/28/02	Guillom et al.	257	10	
	2002/0175390	11/28/02	Goldstein et al	257	481	
	2002/0179434	12/5/02	Dai et al.	204	242	
	2003/0004058	01/02/03	Li, et al.	502	258	
	2003/0021966	01/30/03	Segal, et al.	428	209	
	5,973,444	10/26/99	Xu et al.	313	309	
	6,159,620	12/12/00	Heath et al.	428	615	
	6,187,823	02/13/01	Haddon et al.	516	32	

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
+	WO 01/44796	6/21/01	PCT				
+	WO 01/03208	1/11/01	PCT				
+	EP 1,096,533	95/02/01	Europe				

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
A1	+	Snow, E. et al, "Random Networks of Carbon Nanotubes as an Electronic Material," Applied Physica Letter, March 31, 2003, Vol. 82, No. 13, pgs. 2145-2147.
A2	X	Li, Y., et al., "Growth of Single-Walled Carbon Nanotubes from Discrete Catalytic Nanoparticles of Various Sizes," The Journal of Physical Chemistry B (2001); 105, 11424.
A3	/	Bonard, J., et al., "Monodisperse Multiwall Carbon Nanotubes Obtained with Ferritin as Catalyst," Nano Letters, (2002), Vol. 2, No. 6, pgs. 665-667
A4	†	Colomer, J. F., et al., "Characterization of Single-Walled Carbon Nanotubes Produced by CCVD Method," Chemical Physics Letters (2001); 345, 11-17.

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.	

Subt. For, PTO-1449				Docket Number 112020.126US2 NAN-2		Application Number 10/693,241	
<b>INFORMATION DISCLOSURE IN AN APPLICATION</b>  <i>(Use several sheets if necessary)</i>				Applicant <b>Segal, et al.</b>			
				Filing Date <b>October 24, 2003</b>		Group Art Unit <b>2818</b>	
Sheet	3	OF	3				

A14	✕	Collins, P., et al., "Engineering Carbon Nanotubes and Nanotube Circuits Using Electrical Breakdown," Science (2001); 292: 706-709.
A15	✕	Kim, W., et al., "Synthesis of Ultralong and High Percentage of Semiconduction Single-walled Carbon Nanotubes," Nano Letters (2002); Vol. 2 No. 7 703-708. <b>Published on web 6/01/02</b>
A16	✕	Liu, et al., "Organizing Single-Walled Carbon Nanotubes on Gold Using a Wet Chemical Self-Assembling Technique, Langmuir," April 18, 2000, Vol. 16, No. 8, 3659-3573
A17	✕	Soh, et al., "Integrated Nanotube Circuits: controlled growth and ohmic contacting of single-walled carbon nanotubes," Applied Physics Letters, August 2, 1999, Vol. 75, No. 5, 627-629
A18	✕	Zheng et al, "Chemical Vapor Deposition Growth of Well-Aligned Carbon Nanotube Patterns on Cubic Mesoporous Silica Films by Soft Lithography, Chemistry of Materials, June 9, 2001, Vol. 13, 2240-2242
A19	✕	Huang, et al., "Patterned Growth of Well-Aligned Carbon Nanotubes: A Soft-Lithographic Approach," The Journal of Physical Chemistry B., March 16, 2000, Vol. 104, No. 10, 2193-2196
A20		Chattopadhyay, et al., "Metal-Assisted Organization of Shortened Carbon Nanotubes in Monolayer and Multilayer Forest Assemblies," Journal of the American Chemical Society, August 28, 2001, Vol. 123, 9451-9452

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				Applicant <b>Segal, et al.</b>			
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Sheet	<b>2</b>	OF	<b>3</b>				

U.S. Patent Documents						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,198,655	03/6/01	Heath et al.	365	151	
	6,232,706	05/15/01	Dai et al.	313	309	
	6,250,984	06/21/01	Jin et al.	445	51	
	6,277,318	08/21/01	Bower	264	346	
	6,322,713	11/27/01	Choi et al.	216	38	
	6,350,488	02/26/02	Lee et al.	427	249.1	
	6,407,443	06/18/02	Chen et al	257	616	
	6,413,487	07/02/02	Resasco et al.	423	447.3	
	6,432,740	08/13/02	Chen	438	99	
	6,495,116	12/17/02	Herman	423	447.3	
	6,515,339	02/04/03	Shin et al.	257	368	
	6,518,156	02/11/03	Chen et al	438	597	
	6,566,983	05/20/03	Shin	333	193	
	6,574,130	06/03/03	Segal et al.	365	129	

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)		
A5	X	Li, Y. et al., "Preparation of Monodispersed Fe-Mo Nanoparticles as the Catalyst for CVD Synthesis of Carbon Nanotubes," <i>Chem. Mater.</i> , 12. 1008, 2001.
A6	/	Homma, Y., "Single-Walled Carbon Nanotube Growth on Silicon Substrates Using Nanoparticle Catalysts," <i>Jpn. J. Appl. Phys.</i> , (220) Vol. 41, pgs. L89-L91.
A7	X	Delzeit, L., et al., "Multilayered Metal Catalysts for Controlling the Density of Single-walled Carbon Nanotube Growth," <i>Chemical Physics Letters</i> , 348, 368, 2001.
A8	X	Wei, Y., et al., "Effect of Catalyst Film Thickness on Carbon Nanotube Growth by Selective Area Chemical Vapor Deposition," <i>Applied Physics Letters</i> (2001); Vol. 78, pgs. 1394-1396.
A9	X	Su, M., et al., "A Scalable CVD Method for the Synthesis of Single-Walled Carbon Nanotubes with High Catalyst Productivity." <i>Chemical Physics Letters</i> (2000); Vol. 322, 231-326.
A10	/	Harutyunyan, A., et al., "CVD Synthesis of Single Wall Carbon Nanotubes under 'Soft' Conditions," <i>Nano Letters</i> Vol. 2c no 5 525 (2002); <b>Published on web 3/27/02</b>
A11	X	Li, Q., et al., "High-Density Growth of Single-Wall Carbon Nanotubes on Silicon by Fabrication of Nanosized Catalyst Thin Films," <i>Chem. Mater.</i> (2002), 14, 4262; <b>Published on web 9/11/02</b>
A12	+	Javey, A., et al., "Carbon Nanotube Transistor Arrays for Multistage Complementary Logic and Ring Oscillators," <i>Nano Letters</i> (2002); Vol. 2 No. 9 929-932. <b>Published on web 7/31/02</b>
A13	/	Kong, J., et al., "Syntheses of Individual Single-Walled Carbon Nanotubes on Patterned Wafers," <i>Nature</i> (1998); 395: 878-881.

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